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Attachment 1

Phase I Work Plan DMR

DOCUMENT MODIFICATION REQUEST (DMR)

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or **Type** All Information (Except Signatures)

1. Date	25. DMR. No.
3/28/95	93-DMR-ERM-

2. Existing Document Number/Revision	3. New Document Number or Document Number if it is to be changed with this Revision.
Manual 21100-WP-OU 4.01 Rev. 2	NA
4. Originator's Name/Phone/Page/Location	5. Document Title
S.M. Paris / 8543 / 4624 / 080	Phase I RFI/RI Work Plan Solar Evaporation Ponds Operable Unit No.4

6. Document Type
☐ Procedure ☒ Other Work Plan

7. Document Modification Type (Check only one)
☐ New ☒ Revision ☐ Intent Change ☐ Nonintent Change ☐ Editorial Correction ☐ Cancellation

8. Item	9. Page	10. Step	11. Proposed Modifications
Sect. 7	23 of 44	NA	Paragraph 2 line 2 Add " (except for SEP 207-C)" after "Solar Pond investigation..."
Sect. 7	23 of 44	NA	After the first list of analytes add: "The following chemical and radionuclide parameters or parameter groups will be analyzed in all samples from SEP 207-C: • Nitrate • TAL metals • Uranium 233/234, 235, and 238 • Plutonium -239/240 and Americium -241 • Cesium 134 and 137 • Strontium 89/90 • Gross alpha and beta • TCL volatile organics • TCL semi-volatile organics • Inorganics
Sect. 7	43 of 44	NA	Strike out ".207C" and "3" in the table for the boreholes in SEP 207-C.
Sect. 7	44a of 44	NA	Add a new table specifically for SEP 207-C borings (see attached table).

12. Justification (Reason for Modification, EJO#, TP#, etc.)

SEP 207-C is being sampled for chemical characterization at the upper regions of the subsurface soils. Sampling and analysis is being performed to ensure that the level of contamination is appropriate for disposition beneath the engineered cover.

If modification is for a new procedure or a revision, list concurring disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations are listed in Block 13, then Concurror prints, and signs in Block 14, and dates in Block 15.

13. Organization	14. Print and Sign (if applicable)	15. Date (if applicable)
ER		

16. Originator's Supervisor (print/sign/date)

17. Assigned SME/Phone/Page/Location	18. Cost Center	19. Charge Number	20. Requested Completion Date	21. Effective Date
			April 10, 1995	April 10, 1995

22. Accelerated Review?	23. ORC Review
Yes ☒ No ☐	

24. Responsible Manager (print, sign, date)

REVIEWED FOR CLASSIFICATION/UCNI
BY NA
DATE NA

detection/quantitation limits are listed in Table 7.1. These analytes and limits should address the chemicals that have been previously detected in pond liquids and sludge, the sources for OU4.

Unconsolidated material samples from the Phase I RFI/RI collected in the Original and existing Solar Pond investigation (except for SEP 207-C) will be analyzed for all of the following chemical and radionuclide parameters or parameter groups.

- Nitrate
- Target Analyte List (TAL) Metals
- Uranium 233/234, 235, 236 and 238
- Plutonium and Americium
- Cesium 137 and Strontium 90
- Gross alpha and gross beta
- Tritium
- TCL volatile organics (subsurface samples only)
- TCL semivolatile organics
- Inorganics
- Pesticides

The following chemical and radionuclide parameters or parameter groups will be analyzed in all samples from SEP 207-C:

- Nitrate
- TAL metals
- Uranium 233/234, 235, and 238
- Plutonium -239/240 and Americium -241
- Cesium 134 and 137
- Strontium 89/90
- Gross alpha and beta
- TCL volatile organics
- TCL semi-volatile organics
- Inorganics

Surficial soil samples will be analyzed for only a subset of these parameter groups including:

- Nitrate
- TAL metals
- Uranium 233/234, 235, and 238
- Plutonium and Americium
- Cesium-137 and Strontium-90
- Gross alpha and beta
- Tritium
- TCL semivolatile organics

A restricted suite of analyses will be conducted on unconsolidated material samples collected from within the interceptor trench system and the remainder of the site. The restricted analytical suite has been designed to characterize soil contaminants previously identified in these areas. Contaminants not previously observed above background concentrations in subsurface soils from these areas have been eliminated. In the event that sampling of the Original and existing Solar Pond Areas indicates that eliminated parameters may be of concern in unconsolidated soils of the Interceptor

TABLE 7.5
SUMMARY OF ACTIVITIES
PHASE I RFI/RI OU4
(continued)

Activity	Purpose	Location	No. of Locations	Method	Analysis	Sample Frequency
Drill and sample borings	• Characterize lithologies • Characterize soil chemistry • Identify patterns of leakage • Identify migration pathways • Identify depth to groundwater and bedrock	Existing ponds • 207A • 207BN • 207BC • 207BS • ~~207C~~ • Perimeters	26 total 5 3 3 3 ~~3~~ 9	GT.1 GT.2	Nitrate TAL Metals Uranium 233/234/235/238 Plutonium and Americium Cesium 137 Strontium 90 Gross Alpha and Beta Tritium TCL Volatile Organics TCL Semi-volatile Organics Inorganics Pesticides	Each Location: Chemistry: Minimum of surface plus 5-foot intervals to groundwater Soil: Continuous
Vadose zone monitoring	• Determine infiltration characteristics • Identify perched water horizons • Characterize vadose water quality	Existing ponds • Perimeters	TBD	TBD	TBD	TBD
INTERCEPTOR TRENCH SYSTEM (ITS) & REMINDER OF SITE						
Visual inspection	• Evaluate impacts of structures & topography on field activities	ITS area & remainder of site				
Review as-built drawings	• Evaluate extent to which ITS is keyed into bedrock		NA	NA	NA	1

TABLE 7.5

SUMMARY OF ACTIVITIES
PHASE I RFI/RI OU4
(continued)

Activity	Purpose	Location	No. of Locations	Method	Analysis	Sample Frequency
Hand driven split spoon sampling device	• Characterize soil chemistry • Identify patterns of leakage	SEP 207-C	3	GT.08	Nitrate TAL Metals Uranium 233/234/235/238 Plutonium 239/240 and Americium 241 Cesium 134, 137 Strontium 89/90 Gross Alpha and Beta TCL Volatile Organics TCL Semi-volatile organics Inorganics	Each Location: Chemistry: Sample salt residue. Sample asphalt liners. Sample surface soil beneath the liners and 2 foot discrete intervals down to split spoon refusal or a maximum of 6 feet.

Attachment 2

GT.08 DMR

DOCUMENT MODIFICATION REQUEST (DMR)

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or **Type** All Information (Except Signatures)

1. Date	25. DMR. No.

2. Existing Document Number/Revision	3. New Document Number or Document Number if it is to be changed with this Revision.
GT.08 Rev. 3	
4. Originator's Name/Phone/Page/Location	5. Document Title: Surface Soil Sampling Section 4.5 Below Asphalt or Concrete

6. Document Type	7. Document Modification Type (Check only one)
☒ Procedure ☐ Other ____	☐ New ☒ Revision ☐ Intent Change ☐ Nonintent Change ☐ Editorial Correction ☐ Cancellation

8. Item	9. Page	10. Step	11. Proposed Modifications
4.5.4	22 of 41	2	Change "Cut a small diameter (2 to 4 inches) core of the asphalt or concrete using a water lubricated power coring device" to "measure and mark a 12-by-12 inch area on the asphalt using a chalk marker. Cut on the chalk mark with a cold chisel, a power saw, or an electric jackhammer, taking caution to avoid cutting into and disturbing the underlying soils."

12. Justification (Reason for Modification, EJO#, TP#, etc.)

The procedure specified in the existing GT.08 is not necessary to cut the thinner/softer asphalt liners in the SEP 207-C.

If modification is for a new procedure or a revision, list concurring disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations are listed in Block 13, then *Concurror prints*, and signs in Block 14, and dates in Block 15.

13. Organization	14. Print and Sign (if applicable)	15. Date (if applicable)
ER		

16. Originator's Supervisor (print/sign/date)

17. Assigned SME/Phone/Page/Location	18. Cost Center	19. Charge Number	20. Requested Completion Date	21. Effective Date

22. Accelerated Review? Yes ☒ No ☐	23. ORC Review

24. Responsible Manager (print, sign, date)

REVIEWED FOR CLASSIFICATION/UCNI
BY _____
DATE _____